

ABSTRACT

The verification of accuracy of an IR thermometer is provided at any temperature in the range of -25°C to +100°C, preferably at the room temperature. The magnetic surface of a thermo-conductive mat of the present invention is applied to any metallic surface in a room. The user waits to give the contact thermometer arranged on the mat time to reach thermal equilibrium, and then aims the beam of the IR thermometer at the black body target on the mat. The reading of the IR thermometer is then compared with the reading of a contact thermometer, which is attached to the mat adjacent to the black body target. The lightweight, portable, low-cost temperature verification mats of the present invention can be used for verification of IR thermometers in different customer environments, such as in industrial environments, and with retail equipment, or home appliances, including ovens and freezers, etc.